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EXAMINER
MOORE, IAN N

ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/706,127	WILKINSON, JAMES HEDLEY
	Examiner	Art Unit	
	Ian N. Moore	2616	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 June 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-3,5 and 7-29</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-3,5 and 7-29</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>03 November 2000</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to under 37 CFR 1.83(a). The drawings must show every

feature of the invention specified in the claims. Therefore, **"means for removing"** (claim 26,

line 9; claim 28, line 9) and **"means for providing"** (claim 28, line 12) must be shown or the

feature(s) canceled from the claim(s). **No new matter should be entered. (*This issued has**

***been raised in the previous office action*).**

        Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to

the Office action to avoid abandonment of the application. Any amended replacement drawing

sheet should include all of the figures appearing on the immediate prior version of the sheet,

even if only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

must be removed from the replacement sheet, and where necessary, the remaining figures must

be renumbered and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the

renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The

objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claims 26 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

    Claim 28 recites, "**means for removing**" line 9 and "**means for providing**" in line 12. The applicant invokes U.S.C. 112, six paragraph by using "means plus function" in the apparatus claim. However, neither the specification nor drawings discloses corresponding structure, materials, or acts. Thus the claim is unclear. Note that if a claim limitation invokes 35 U.S.C. 112, six paragraph, it must be interpreted to cover the corresponding structure, materials, or acts in the specification and "equivalents thereof." Also see MPEP 2181.

    Claim 26 is also rejected for the same reason as stated above.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.   Claims 1-3,5,7-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter on the basis of following reasons.

Claim 1 is directed to non-statutory on the basis of a data/file structure with no practical application of how or where this is particular signal is used, and thus preempts an abstract idea and lacks a substantial application of abstract of idea (§ 101 Judicial exceptions).

Claim 1 recites, "**a computer readable medium that can be accessed by a computer system as file structure,**...comprising...a label having...a word count indicating...one or more element data blocks...an item header...wherein the system Item includes metadata...and **wherein the computer system access the file structure including the metadata in the System Item to facilitate accessing the one or more of the Picture, Audio and Auxiliary Items...**"

As described above, claim 1 recites, a file structure stored a computer readable medium is accessed by a computer system, a file structures specific abstract idea formats (i.e. label, word counts, and etc.), and computer system accessing the file structure (i.e. accessing system Item field of a SDTI frame in order to access one or more of Picture, Audio and Auxiliary Items) and without any substation practical application of how such a file structure is being transformed and used. Thus, the claimed file structure covers every substantial practical application of an abstract idea, thereby; the claim invention preempts a 101 judicial exception of abstract idea.

For claims including such excluded subject matter to be eligible, the claim must be for a practical application of the abstract idea, law of nature, or natural phenomenon. Diehr, 450 U.S. at 187, 209 USPQ at 8 ("application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection."); Benson, 409 U.S. at 71, 175 USPQ at 676 (rejecting formula claim because it "has no substantial practical application"). The claimed does not in reality "seek[] patent protection for that formula in the abstract." Diehr, 450 U.S. at 191, 209 USPQ at 10. "Phenomena of nature, though just discovered, mental processes,

abstract intellectual concepts are not patentable, as they are the basic tools of scientific and

technological work." Benson, 409 U.S. at 67, 175 USPQ at 675. One may not patent a process

that comprises every "substantial practical application" of an abstract idea, because such a patent

"in practical effect would be a patent on the [abstract idea] itself." Benson, 409 U.S. at 71-72,

175 USPQ at 676; cf. Diehr, 450 U.S. at 187, 209 USPQ at 8 (stressing that the patent applicants

in that case did "not seek to pre-empt the use of [an] equation," but instead sought only to

"foreclose from others the use of that equation in conjunction with all of the other steps in their

claimed process"). "To hold otherwise would allow a competent draftsman to evade the

recognized limitations on the type of subject matter eligible for patent protection." Diehr, 450

U.S. at 192, 209 USPQ at 10. Thus, a claim that recites a computer that solely calculates a

mathematical formula (see Benson) or a computer readable medium that can be accessed by a

computer system as a file that solely stores a mathematical formula or specific format of a file is

not directed to the type of subject matter eligible for patent protection.

If the "acts" of a claimed signal manipulate only numbers, abstract concepts or ideas, or

signals representing any of the foregoing, the acts are not being applied to appropriate subject

matter. Schrader, 22 F.3d at 294-95, 30 USPQ2d at 1458-59. **Thus, a file structure consisting**

solely of mathematical operations, i.e., forming/producing one set of format into another set

of format does not manipulate appropriate subject matter and thus cannot constitute a

statutory process, machine, or compositions of matter or manufactures.

Claim 2 is directed to non-statutory on the basis of the computer related non-statutory

subject matter of "signal format", and lacking a practical application. Claim 2 recites, "**a signal**

format for use in a system which transfers data to and/or from an SDTI system, the signal

format comprising...a word count indicating...one or more element data blocks...Item

header...each item being modified in that a label...an item header...wherein the system Item

includes metadata...**wherein the SDTI system access the file structure including the**

metadata in the System Item to facilitate accessing the one or more of the Picture, Audio

and Auxiliary Items..."

As described above, claim 2 recites, a signal format for use in a system which transfers

data to an SDTI system or from the SDTI system, the signal comprises abstract idea formats (i.e.

label, word counts, and etc.), and SDTI system accessing the file structure (i.e. accessing system

Item field of a SDTI frame in order to access one or more of Picture, Audio and Auxiliary Items)

and without any substation practical application of how such a signal format is being transformed

and used. Thus, the claimed signal format covers every substantial practical application of an

abstract idea, thereby; the claim invention preempts a 101 judicial exception of abstract idea.

For claims including such excluded subject matter to be eligible, the claim must be for a

practical application of the abstract idea, law of nature, or natural phenomenon. Diehr, 450 U.S.

at 187, 209 USPQ at 8 ("application of a law of nature or mathematical formula to a known

structure or process may well be deserving of patent protection."); Benson, 409 U.S. at 71, 175

USPQ at 676 (rejecting formula claim because it "has no substantial practical application"). The

claimed does not in reality "seek[] patent protection for that formula in the abstract." Diehr, 450

U.S. at 191, 209 USPQ at 10. "Phenomena of nature, though just discovered, mental processes,

abstract intellectual concepts are not patentable, as they are the basic tools of scientific and

technological work." Benson, 409 U.S. at 67, 175 USPQ at 675. One may not patent a process

that comprises every "substantial practical application" of an abstract idea, because such a patent

"in practical effect would be a patent on the [abstract idea] itself." Benson, 409 U.S. at 71-72, 175 USPQ at 676; cf. Diehr, 450 U.S. at 187, 209 USPQ at 8 (stressing that the patent applicants in that case did "not seek to pre-empt the use of [an] equation," but instead sought only to "foreclose from others the use of that equation in conjunction with all of the other steps in their claimed process"). "To hold otherwise would allow a competent draftsman to evade the recognized limitations on the type of subject matter eligible for patent protection." Diehr, 450 U.S. at 192, 209 USPQ at 10. Thus, a claim that recites a computer that solely calculates a mathematical formula (see Benson) or a computer readable medium that can be accessed by a computer system as a file that solely stores a mathematical formula or specific format of a file is not directed to the type of subject matter eligible for patent protection.

If the "acts" of a claimed signal manipulate only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the acts are not being applied to appropriate subject matter. Schrader, 22 F.3d at 294-95, 30 USPQ2d at 1458-59. **Thus, a signal format consisting solely of mathematical operations, i.e., forming/producing one set of format into another set of format does not manipulate appropriate subject matter and thus cannot constitute a statutory process, machine, or compositions of matter or manufactures.**

Regarding computer related non-statutory basic, claim 2 does not appear that a claim reciting a signal stored on the functional descriptive material (i.e. computer readable medium) falls within any of the categories of patentable subject matter set forth in § 101. First, **a claimed signal format is clearly <u>not</u> a "process" under § 101 because it is not a series of steps**. The other three § 101 classes of machine, compositions of matter and manufactures "relate to structural entities and can be grouped as 'product' claims in order to contrast them with process

claims." 1 D. Chisum, Patents § 1.02 (1994). The three product classes have traditionally

required physical structure or material. "The term machine includes every mechanical device or

combination of mechanical device or combination of mechanical powers and devices to perform

some function and produce a certain effect or result." Corning v. Burden, 56 U.S. (15 How.) 252,

267 (1854). A modern definition of machine would no doubt include electronic devices, which

perform functions. Indeed, devices such as flip-flops and computers are referred to in computer

science as sequential machines. **A claimed signal has no physical structure, does not itself**

perform any useful, concrete and tangible result and, thus, does _not_ fit within the definition

of _a machine_.

A "composition of matter" "covers all compositions of two or more substances and

includes all composite articles, whether they be results of chemical union, or of mechanical

mixture, or whether they be gases, fluids, powders or solids." Shell Development Co. v. Watson,

149 F. Supp. 279, 280, 113 USPQ 265, 266 (D.D.C. 1957), aff'd, 252 F.2d 861, 116 USPQ 428

(D.C. Cir. 1958). A claimed signal is not matter, but a form of energy, and therefore is not a

composition of matter. The Supreme Court has read the term "manufacture" in accordance with

its dictionary definition to mean "the production of articles for use from raw or prepared

materials by giving to these materials new forms, qualities, properties, or combinations, whether

by hand-labor or by machinery." Diamond v. Chakrabarty, 447 U.S. 303, 308, 206 USPQ 193,

196-97 (1980) (quoting American Fruit Growers, Inc. v. Brogdex Co., 283 U.S. 1, 11, 8 USPQ

131, 133 (1931), which, in turn, quotes the Century Dictionary). Other courts have applied

similar definitions. See American Disappearing Bed Co. v. Arnaelsteen, 182 F. 324, 325 (9th

Cir. 1910), cert. denied, 220 U.S. 622 (1911). These definitions require physical substance,

which a claimed signal does not have. Congress can be presumed to be aware of an

administrative or judicial interpretation of a statute and to adopt that interpretation when it re-

enacts a statute without change. Lorillard v. Pons, 434 U.S. 575, 580 (1978). Thus, Congress

must be presumed to have been aware of the interpretation of manufacture in American Fruit

Growers when it passed the 1952 Patent Act. A manufacture is also defined as the residual class

of product. 1 Chisum, § 1.02[3] (citing W. Robinson, The Law of Patents for Useful Inventions

270 (1890)).

A product is a tangible physical article or object, some form of matter, which a signal is

not. That the other two product classes, machine and composition of matter, require physical

matter is evidence that a manufacture was also intended to require physical matter. **A signal, a**

form of energy, does not fall within either of the two definitions of manufacture. Thus, a

signal does not fall within one of the four statutory classes of § 101.

On the other hand, from a technological standpoint, a signal encoded with functional

descriptive material is similar to a computer-readable memory encoded with functional

descriptive material, in that they both create a functional interrelationship with a computer. In

other words, a computer is able to execute the encoded functions, regardless of whether the

format is a disk or a signal. **Thus, Claim 1 is ineligible for patent protection because they do**

not fall within any of the four statutory classes of § 101.

Claim 9 is directed to non-statutory on the basis of the claim invention preempts an

abstract idea and lacks a substantial application of abstract of idea (§ 101 Judicial exceptions).

Claim 1 recites, "**a file for storage in computer system comprising...**a concatenation of one or

more SDTI content packages...each comprising a word count...one or more element data

blocks...an Item header...the data of the system item includes metadata..." in the entire claim.

As described above, claim 9 recites a file for storage without any substation practical

application. Thus, the claimed file covers every substantial practical application of an abstract

idea, thereby; the claim invention preempts a 101 judicial exception of abstract idea.

For claims including such excluded subject matter to be eligible, the claim must be for a

practical application of the abstract idea, law of nature, or natural phenomenon. Diehr, 450 U.S.

at 187, 209 USPQ at 8 ("application of a law of nature or mathematical formula to a known

structure or process may well be deserving of patent protection."); Benson, 409 U.S. at 71, 175

USPQ at 676 (rejecting formula claim because it "has no substantial practical application"). The

claimed does not in reality "seek[] patent protection for that formula in the abstract." Diehr, 450

U.S. at 191, 209 USPQ at 10. "Phenomena of nature, though just discovered, mental processes,

abstract intellectual concepts are not patentable, as they are the basic tools of scientific and

technological work." Benson, 409 U.S. at 67, 175 USPQ at 675. One may not patent a process

that comprises every "substantial practical application" of an abstract idea, because such a patent

"in practical effect would be a patent on the [abstract idea] itself." Benson, 409 U.S. at 71-72,

175 USPQ at 676; cf. Diehr, 450 U.S. at 187, 209 USPQ at 8 (stressing that the patent applicants

in that case did "not seek to pre-empt the use of [an] equation," but instead sought only to

"foreclose from others the use of that equation in conjunction with all of the other steps in their

claimed process"). "To hold otherwise would allow a competent draftsman to evade the

recognized limitations on the type of subject matter eligible for patent protection." Diehr, 450

U.S. at 192, 209 USPQ at 10. Thus, a claim that recites a computer that solely calculates a

mathematical formula (see Benson) or a computer disk that solely stores a mathematical formula

is not directed to the type of subject matter eligible for patent protection.

If the "acts" of a claimed process manipulate only numbers, abstract concepts or ideas, or

signals representing any of the foregoing, the acts are not being applied to appropriate subject

matter. Schrader, 22 F.3d at 294-95, 30 USPQ2d at 1458-59. Thus, a process consisting solely of

mathematical operations, i.e., converting one set of numbers into another set of numbers, does

not manipulate appropriate subject matter and thus cannot constitute a statutory process.

If the "acts" of a claimed file manipulate only numbers, abstract concepts or ideas, or

signals representing any of the foregoing, the acts are not being applied to appropriate subject

matter. Schrader, 22 F.3d at 294-95, 30 USPQ2d at 1458-59. **Thus, a file consisting solely of**

mathematical operations, i.e., converting, forming/producing and storing one set of format

into another set of format, does not manipulate appropriate subject matter and thus cannot

constitute a statutory process, machine, or compositions of matter or manufactures.

In accordance with MPEP (see MPEP 2106), in practical terms, claims define

nonstatutory processes if they:

– consist solely of mathematical operations without some claimed practical application

(i.e., executing a "mathematical algorithm"); or

– simply manipulate abstract ideas, e.g., a bid (Schrader, 22 F.3d at 293-94, 30 USPQ2d

at 1458-59) or a bubble hierarchy (Warmerdam, 33 F.3d at 1360, 31USPQ2d at 1759), without

some claimed practical application.

Claim 12 recites, "**a method of producing a signal**... comprising...a label having...a word count indicating...one or more element data blocks...an item header...wherein the system Item includes metadata" in the entire claim.

As described above, claim 12 recites a method without any substation practical application. Thus, the claimed series of steps cover every substantial practical application of an abstract idea, thereby; the claim invention preempts a 101 judicial exception of abstract idea; and there is no "useful, tangible and concrete" final result from physical transformation (i.e. after performing series of step to produce the final format of a signal).

Regarding preemption an abstract idea and lacks a substantial application, for claims including such excluded subject matter to be eligible, the claim must be for a practical application of the abstract idea, law of nature, or natural phenomenon. Thus, a claim that recites a computer that solely calculates a mathematical formula or a computer disk that solely stores a mathematical formula is not directed to the type of subject matter eligible for patent protection.

Regarding no "useful, tangible, and concrete" final result after transformation, the claim only recites how the steps of producing a specific format of the signal, but it does not disclose such final resulted signal is useful, tangible, and concrete.

For eligibility analysis, physical transformation "is not an invariable requirement, but merely one example of how a mathematical algorithm [or law of nature] may bring about a useful application." AT&T, 172 F.3d at 1358-59, 50 USPQ2d at 1452. Note that in determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete." The claim is directed to a

practical application of the § 101 judicial exception producing a result tied to the physical world

that preempt the judicial exception, and thus then the claim does not meet the statutory

requirement of 35 U.S.C. § 101.

Claim 13 recites, "**a method of forming a signal**... comprising...a label having...a word

count indicating...one or more element data blocks...an item header...wherein the system Item

includes metadata..." in the entire claim. Thus, it is also rejected for the same reason as stated

above in claim 12.

Claim 25 recites, "**a method of forming a signal comprising...**" in line 1. Thus, it is also

rejected for the same reason as stated above in claim 13.

Claim 20 recites, "**apparatus for forming a signal**... comprising...an input for receiving

an SDTI signal comprising an SDTI content package...each comprising...a start code, a word

count...element data blocks...an item header...an end code...a format converter for

removing...and for inserting a label ...wherein the system Item includes metadata..." in the

entire claim. Claim 20 recites apparatus for forming a content package without any substation

practical application. Thus, the claimed apparatus process the series of steps that cover every

substantial practical application of an abstract idea, thereby; the claim invention preempts a 101

judicial exception of abstract idea; and there is no "useful, tangible and concrete" final result

from physical transformation (i.e. after performing series of step to produce the final format of a

signal).

Claim 26 recites, "**a format converter** comprising..." in line 1. Thus, it is also rejected

for the same reason as stated above in claim 20.

Claim 28 recites, "**a format converter** comprising…" in line 1. Thus, it is also rejected

for the same reason as stated above in claim 20.

Claim Rejections - 35 USC § 102 (b)

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

7.   Claims 1, 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by

Wilkinson (IEEE, Ref. No. 1997/382).

Regarding Claim 1, Wilkinson discloses a computer readable medium that can be

accessed by a computer system (section 2.1, router switching contains a processor,CPU, or

computer system) as a file structure (see FIG. 1, a data/file structure), comprising a Content

Package (see FIG. 1, SDTI variable block of SDTI frame/package) having at least a System Item

(see FIG. 1 and 9, Control data) and one or more of a Picture Item, an Audio Item and an

Auxiliary Item (see FIG. 1, 2,6,7; Video data (which comprises picture and/or ancillary data)

and/or Audio data), wherein the System (see FIG. 9) and the one of the Picture, Audio and

Auxiliary Items (see FIG. 2,6,7) each comprises:

a Label (see FIG. 2, Type field in video format; see FIG. 7, Type field in audio format; or

see FIG. 9, Type field in control format) having a predetermined number of bytes and including

at least one byte identifying the Item (see FIG. 2,7,9, one byte type field identifies the type of the

data); see section 2, 2.1, 2.2, 2.3,2.4;

a word count (see FIG. 2, Word Count field in video format; see FIG. 7, Word Count

field in audio format; or see FIG. 9, Word Count field in control format) indicating the number

of bytes of data of the Item (see section 2, 2.1, 2.2, 2.3, 2.4); and

one or more Element data blocks (see FIG. 2-5, Video data Macroblocks (MB) in video

format; see FIG. 6, ancillary MBs in video format; or see FIG. 7, Audio channel/block in audio

format); see section 2.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.3; and

an Item header, preceding the number of data blocks (see FIG. 2-5; 4 byte MB header

(i.e. GOP header, system, video index) in video format, see FIG. 6, MB header in ancillary

format; or see FIG. 7-8, Audio header in audio format; note MB header in video, or audio header

in audio format are before the MB video data or audio data), and indicating the number of

element data blocks in the Item (see FIG. 4-6, MB length in video or ancillary; or see FIG. 8, the

audio header calculates the block length of audio); see section 2, 2.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4,

2.3.

wherein the system Item includes metadata (see FIG. 9, Control Data Item, note that

control data represents metadata, also known as, "data about data")) relating to one or more of

the Picture, Audio and Auxiliary Items in the content package (see section 2.4; "data about data"

or "metadata" in the control data items relates to content of video and audio data in the SDTI

frame),

and the computer system access the file structure including the metadata in the System

Item (see section 2.1, a CPU/processor access the data structure in FIG. 1 that includes control

data packet with "data about data"; also see FIG. 1 and 9) to facilitate accessing the one or more

of the Picture, Audio and Auxiliary Items (see section 2.1, in order to access the video and/or

Audio data in FIG. 1 since control data packet relates to content of video and/or audio data; also see FIG. 9, table, section 2.4,2.5).

Regarding Claim 12 and 15, a method claim of producing a signal stored on a computer readable medium (or storage) that can be accessed by a computer system as a file, which substantially discloses all the limitations of the respective system claim 1. Wilkinson further discloses forming a Content Package (see FIG. 1, SDTI variable block of SDTI frame/package) by concatenating at least a System Item (see FIG. 1 and 9, Control data) and one ore more of a Picture Item, Audio Item and Auxiliary Item (see FIG. 1, 2,6,7; Video data (which comprises picture and/or ancillary data) and/or Audio data);

the System, and the one or more of the Picture, Audio and Auxiliary Item being formed by concatenating (see section 2, 2.1; SDTI frame is formed by encapsulating/concatenation control data and Video data (which comprises picture and/or ancillary data) and/or Audio data). Therefore, it is subjected to the same rejection.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 2,5,7-11,13,14,16-21, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkinson in view of Eneroth (US 6,631,116).

Regarding Claim 2, Wilkinson discloses a signal format (see FIG. 1) for use in a system

which transfers data to and/or from an SDTI system (see FIG. 1, SDTI system), the signal format

comprising a SDTI Content Package (see FIG. 1, SDTI variable block of SDTI frame/package)

having at least a System Item (see FIG. 1 and 9, Control data) and one or more of a Picture Item,

an Audio Item and an Auxiliary Item (see FIG. 1, 2,6,7; Video data (which comprises picture

and/or ancillary data) and/or Audio data), the System (see FIG. 9) and the one or more of the

Picture, Audio and Auxiliary Items (see FIG. 2,6,7)) each comprises:

a word count (see FIG. 2, Word Count field in video format; see FIG. 7, Word Count

field in audio format; or see FIG. 9, Word Count field in control format) indicating the number

of bytes of data of the Item (see section 2, 2.1, 2.2, 2.3, 2.4); and

one or more Element data blocks (see FIG. 2-5, Video data Macroblocks (MB) in video

format; see FIG. 6, ancillary MBs in video format; or see FIG. 7, Audio channel/block in audio

format); see section 2.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.3; and

an Item header, preceding the number of data blocks (see FIG. 2-5; 4 byte MB header

(i.e. GOP header, system, video index) in video format, see FIG. 6, MB header in ancillary

format; or see FIG. 7-8, Audio header in audio format; note MB header in video, or audio header

in audio format are before the MB video data or audio data), and indicating the number of

element data blocks in the Item (see FIG. 4-6, MB length in video or ancillary; or see FIG. 8, the

audio header calculates the block length of audio); see section 2, 2.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4,

2.3.

each Item being modified in that a Label (see FIG. 2, Type field in video format; see FIG.

7, Type field in audio format; or see FIG. 9, Type field in control format) having a predetermined

number of bytes and identifying the item (see FIG. 2,7,9, one byte type field identifies the type

of the data); see section 2, 2.1, 2.2, 2.3,2.4; Start Code of the item (see FIG. 1, SAV, Start of

active video) and the End Code of the Item (see FIG. 1, EAV, End of active video), and

the system Item includes metadata (see FIG. 9, Control Data Item, note that control data

represents metadata, also known as, "data about data")) relating to one or more of the Picture,

Audio and Auxiliary Items in the content package (see section 2.4; "data about data" or

"metadata" in the control data items relates to content of video and audio data in the SDTI

frame);

and the SDTI system access the metadata in the System Item (see section 2.1, a

CPU/processor access the data structure in FIG. 1 that includes control data packet with "data

about data"; also see FIG. 1 and 9) to facilitate accessing the one or more of the Picture, Audio

and Auxiliary Items (see section 2.1, in order to access the video and/or Audio data in FIG. 1

since control data packet relates to content of video and/or audio data; also see FIG. 9, table,

section 2.4,2.5).

Wilkinson does not explicitly disclose label replaces the start code and the end code is

removed. However, Eneroth teaches a Label (see FIG. 6, label E 13, see FIG. 10, LEQ codes; see

col. 6, lines 5-25) having a predetermined number and identifying the Item (see FIG. 6 or 9, label

or LEQ has predetermined number to identify the length of the cell) replaces the Start Code of

the Item (see FIG. 6, label E field 11, or see FIG. 9, LEQ field 25; label or LEQ code is

replaced/inserted at the beginning/start of the cell) and the End Code of the Item is removed (see

col. 5, lines 1 to col. 6, lines 10; and thus when replacing label/codes (e.g. 0, 1, 00, 11, etc.) at the

start of the payload which represent both start and end of the payload, there is no end code/flag

require (i.e. removing both start and end code)). Therefore, it would have been obvious to one

having ordinary skill in the art at the time the invention was made to replace label/codes (e.g. 0,

1, 00, 11, etc.) at the start of the payload which represent both start and end of the payload, as

taught by Eneroth in the system of Wilkinson, so that it would dynamically change the size of the

cell during an ongoing connection thereby providing efficiency while the overhead cost is

reduced; see Eneroth col. 1, line 20-67.

Regarding Claims 13, 20 and 26, Wilkinson discloses an apparatus (see section 1, 1.1;

equipment/machine) for forming a content package (see FIG. 1, SDTI variable block of SDTI

frame/package) comprising:

an input (see section 1, 1.1; input to a equipment/machine) for receiving an SDTI signal

comprising an SDTI Content Package (see FIG. 1, SDTI variable block of SDTI frame/package)

having a System Item (see FIG. 1 and 9, Control data) and one or more of a Picture Item, an

Audio Item and an Auxiliary Item, (see FIG. 1, 2,6,7; Video data (which comprises picture

and/or ancillary data) and/or Audio data) the System and one or more of the Picture, Audio and

Auxiliary Items each comprising:

a start code (see FIG. 1, SAV, Start of active video), a word count (see FIG. 2, Word

Count field in video format; see FIG. 7, Word Count field in audio format; or see FIG. 9, Word

Count field in control format) indicating the number of bytes of data of the Item (see section 2,

2.1, 2.2, 2.3, 2.4), one or more Element data blocks (see FIG. 2-5, Video data Macroblocks (MB)

in video format; see FIG. 6, ancillary MBs in video format; or see FIG. 7, Audio channel/block

in audio format); see section 2.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.3; and an Item header, preceding the

number of data blocks (see FIG. 2-5; 4 byte MB header (i.e. GOP header, system, video index) in

video format, see FIG. 6, MB header in ancillary format; or see FIG. 7-8, Audio header in audio

format; note MB header in video, or audio header in audio format are before the MB video data

or audio data), and indicating the number of element data blocks in the Item (see FIG. 4-6, MB

length in video or ancillary; or see FIG. 8, the audio header calculates the block length of audio);

see section 2, 2.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.3; and an end code (see FIG. 5, EAV, End of active

video); see col. 1, lines 40-50; see col. 3, lines 20-30; and

the Label (see FIG. 2, Type field in video format; see FIG. 7, Type field in audio format;

or see FIG. 9, Type field in control format) having a predetermined number of bytes and at least

one byte identifying the Item (see FIG. 2,7,9, one byte type field identifies the type of the data);

see section 2, 2.1, 2.2, 2.3,2.4;

a format converter (see section 1, 1.1; see FIG. 1; a equipment or machine performs

forming/converting data into SDTI variable block of SDTI frame/package);

wherein the system Item includes metadata (see FIG. 9, Control Data Item, note that

control data represents metadata, also known as, "data about data")) relating to one or more of

the Picture, Audio and Auxiliary Items in the content package (see section 2.4; "data about data"

or "metadata" in the control data items relates to content of video and audio data in the SDTI

frame).

Wilkinson does not explicitly disclose removing the start and end codes and inserting a

Label in place of the start code. However, Eneroth teaches a format converter (see FIG. 17-18)

removing the start and end codes (see col. 5, lines 1 to col. 6, lines 10; and thus when replacing

label/codes (e.g. 0, 1, 00, 11, etc.) at the start of the payload which represent both start and end of

the payload, there is no end code/flag require (i.e. removing both start and end code); and

Inserting a Label (see FIG. 6, label E 13, see FIG. 10, LEQ codes; see col. 6, lines 5-25)

in place of the start code (see FIG. 6, label E field 11, or see FIG. 9, LEQ field 25; label or LEQ

code is replaced/inserted at the beginning/start of the cell)

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to insert label/codes (e.g. 0, 1, 00, 11, etc.) at the start of the payload

which represent both start and end of the payload, as taught by Eneroth in the system of

Wilkinson, so that it would dynamically change the size of the cell during an ongoing connection

thereby providing efficiency while the overhead cost is reduced; see Eneroth col. 1, line 20-67.

Regarding Claim 5, Wilkinson discloses wherein each Element data block comprises: at

least one word indicating the number of words in the Element (see FIG. 1, 4, 5, 6; MB length in

the first frame), and if the number of words in the Element greater than zero, (see FIG. 1, 6;

when MB length is greater than zero (i.e. more than one frame, or first frame and second frame);

at least one word defining the type of element (see FIG. 1, 4, 5, 6; MB information/type in the

second frame) and at least one word indicating the number of the Element (see FIG. 1, 4, 5, 6;

MB length in the second frame), and the data of the Element (see FIG. 1, 4, 5, 6; video, audio,

ancillary data in the MB); see section 2, 2.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.3.

Regarding Claim 7, Wilkinson discloses wherein the said metadata includes link

metadata which links metadata relating to an Element to the Element to which it relates (see

section 2.4; "data about data" or "metadata" in the control data items relates to each MB of video

and audio data (i.e. audio data 1,2,4 in control data 5-7, and video data in control data 8, and

etc.).

Regarding Claims 8 and 14, Wilkinson discloses the label has a predetermined fixed

format except for said byte identifying the Item (see FIG. 2,7,9, see section 2, 2.1, 2.2, 2.3,2.4;

note that label field has fixed format except the specific byte that identify the data type/item

since the specific byte varies according to the specific type (i.e. video, audio, etc.). Eneroth

discloses the label has a predetermined fixed format (see FIG. 6, label E 13, see FIG. 10, LEQ

codes; see col. 6, lines 5-25).

Regarding Claims 9 and 16, the combined system of Wilkinson and Eneroth discloses

all limitation as set forth above. Wilkinson further discloses the computer system access the file

structure including the metadata in the System Item (see section 2.1, a CPU/processor access the

data structure in FIG. 1 that includes control data packet with "data about data"; also see FIG. 1

and 9) to facilitate accessing the one or more of the Picture, Audio and Auxiliary Items (see

section 2.1, in order to access the video and/or Audio data in FIG. 1 since control data packet

relates to content of video and/or audio data; also see FIG. 9, table, section 2.4,2.5).

Wilkinson further discloses concatenating of one or more SDTI content package (see

section 2, 2.1; SDTI frame is formed by encapsulating/concatenation control data and Video data

(which comprises picture and/or ancillary data) and/or Audio data); and a Content Package (see

FIG. 1, SDTI variable block of SDTI frame/package) by concatenating at least a System Item

(see FIG. 1 and 9, Control data) and one ore more of a Picture Item, Audio Item and Auxiliary

Item (see FIG. 1, 2,6,7; Video data (which comprises picture and/or ancillary data) and/or Audio

data).

Regarding Claims 10 and 17, Wilkinson discloses a concatenation of a plurality of

Content Packages, each Content Package including one video frame (see section 2, 2.1).

Regarding Claims 11 and 18, Wilkinson discloses the frames are compressed video

frames (see section 2, 2.1; compressed video data).

Regarding Claim 19, the combined system of Wilkinson and Eneroth discloses all the

limitations of the respective system claim 1. Wilkinson discloses transferring video data within a

computer network (see section 1, 1.1, 1.2, 2; equipment/machine transmission of video data in

the computer network) comprising: forming a file (see FIG. 1, SDTI variable block of SDTI

frame/package) comprising a video data as defined in claim 17 (see section 2, 2.1); and

transferring the file (see section 1, 2, 2.1; transmission of SDTI frame). Eneroth also discloses

forming a file/frame and transmitting over the computer network as set forth above.

Regarding Claim 21, Wilkinson discloses a signal source for producing the SDTI signal

(see section 1, 1.1, 12, 1.3; equipment/machine performing transmission of SDTI signal. Thus, it

is clear that equipment/machine is also a signal source).

10.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkinson in view

of Mendenhall (US006341198B1).

Regarding Claim 3, Wilkinson discloses wherein the Label has a fixed number of bytes

and at least one byte of variable value for identifying an item (see FIG. 2,7,9,

fixed/predetermined type fields for video, audio, and control data, and one byte type field

identifies the data type (e.g. video, audio, control) data. Note that in order to identify a variety

type of data, each type value must be variable for identifying (e.g. value A=video, B=audio,

etc.); see section 2, 2.1, 2.2, 2.3,2.4.

Wilkinson does not explicitly disclose preassigned values. However, Mendenhall teaches

wherein the Label (see FIG. 2 and 4, a combined system of packet start, stream ID, various flag,

sub-stream ID) has a fixed number of bytes having preassigned values (see FIG. 2, a combined

system has fixed number of bytes and have preassigned values (i.e. packet start with 3 bytes with

preassigned value "000001h") and at least one byte of variable value for identifying an item/data

(see FIG. 2 and 4, stream ID or sub-stream ID has 1 byte of variable codes for identifying the

data steam; see col. 1, lines 39 to col. 3, line 55; see col. 5, line 45 to col. 6, line 14). Therefore,

it would have been obvious to one having ordinary skill in the art at the time the invention was

made to provide data type with preassigned values for transmission, as taught by Mendenhall in

the system of Wilkinson, so that it would provide a receiving unit to rapid identify which type of

packet is being received in the data stream and respond accordingly; see Mendenhall col. 1, line

60-65.

11.   Claim 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkinson in

view of Eneroth, as applied to claim 20 above, and further in view of Yamane (US 5,784,528).

        Regarding Claim 22, the combined system of Wilkinson and Eneroth discloses receiving

the SDTI signal and the said removing and inserting means within a format converter as

described above in claim 20.

        Neither Wilkinson nor Eneroth explicitly disclose a buffer for storing the signal.

However, Yamane discloses a buffer (see FIG. 3, Video Buffer 2600, picture buffer 2700, and/or

audio buffer 2800; or see FIG. 2, buffer 400,600,800) for storing the signal (see col. 12, lines 40-

45; see col. 8, lines 5-15) and providing it to the said removing and inserting means (see FIG. 3.

video decoder 3800, sub picture decoder 3100, and/or audio decoder 3200; see col. 12, lines 40-67; or see FIG. 2, system encoder 900; see col. 10, lines 15-50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a buffer to store the signal, as taught by Yamane, in the combined system of Wilkinson and Eneroth, so that it would efficiently controlled a large volume multiple digital bitstream and provide a data structure that seamlessly reproduced; see Yamane col. 1, line 40 to col. 3, lines 36.

Regarding Claim 23, the combined system of Wilkinson and Eneroth discloses a computer system having a storage for storing files, and said format converter for producing the SDTI signal as set forth in above in claims 20-22.

Neither Wilkinson nor Eneroth explicitly discloses said format converter being an interface between the said signal source for producing the signal and the computer system. However, Yamane discloses a computer system having a store for storing files (see FIG. 2, recorder 1200 and disk M), the said format converter (see FIG. 2, a combined system of system encoder 900 and video formatter 1300) being an interface between the said signal source for producing the signal (see FIG. 2, a signal source that connects to Video encoder 300, Sub picture encoder 500 and audio encoder 700 and their corresponding buffers) and the computer system (see FIG. 2, recorder 1200 and disk M); see col. 7, line 40 to col. 11, line 15. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a buffer to store the signal, as taught by Yamane, in the combined system of Wilkinson and Eneroth, for the same motivation as stated above in claim 22.

Regarding Claim 24, Yamane discloses wherein the computer system comprises a network of file (see FIG. 2, recorder 1200 and disk M) stores linked by a file transfer system (see FIG. 2, Encode system controller 200; see col. 7, line 40 to col. 11, line 15). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a buffer to store the signal, as taught by Yamane, in the combined system of Wilkinson and Eneroth, for the same motivation as stated above in claim 22.

12.   Claims 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkinson in view of Yamashita (US 5,696,557) and Tappan (US 006295296B1).

Regarding Claims 25 and 28, Yamashita discloses a format converter (see section 1, 1.1; see FIG. 1; a equipment or machine performs forming/converting data into SDTI variable block of SDTI frame/package) comprising:

an input for receiving an signal ((see section 1, 1.1; input to a equipment/machine) comprising a Content Package (see FIG. 1, SDTI variable block of SDTI frame/package) having at least a System Item (see FIG. 1 and 9, Control data) and one or more of a Picture Item, an Audio Item and an Auxiliary Item (see FIG. 1, 2,6,7; Video data (which comprises picture and/or ancillary data) and/or Audio data) the System and one or more of the Picture, Audio and Auxiliary Items each comprising

a Label (see FIG. 2, Type field in video format; see FIG. 7, Type field in audio format; or see FIG. 9, Type field in control format) having a predetermined number of bytes and at least one byte identifying the Item (see FIG. 2,7,9, one byte type field identifies the type of the data); see section 2, 2.1, 2.2, 2.3,2.4),

a word count (see FIG. 2, Word Count field in video format; see FIG. 7, Word Count

field in audio format; or see FIG. 9, Word Count field in control format) indicating the number

of bytes of data of the Item (see section 2, 2.1, 2.2, 2.3, 2.4);

one or more Element data blocks (see FIG. 2-5, Video data Marcorblocks (MB) in video

format; see FIG. 6, ancillary MBs in video format; or see FIG. 7, Audio channel/block in audio

format); see section 2.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.3; and

an Item header, preceding the number of data blocks (see FIG. 2-5; 4 byte MB header

(i.e. GOP header, system, video index) in video format, see FIG. 6, MB header in ancillary

format; or see FIG. 7-8, Audio header in audio format; note MB header in video, or audio header

in audio format are before the MB video data or audio data), and indicating the number of

element data blocks in the Item (see FIG. 4-6, MB length in video or ancillary; or see FIG. 8, the

audio header calculates the block length of audio); see section 2, 2.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4,

2.3;

means for converting/forming (see section 1, 1.1; see FIG. 1; a equipment or machine

performs forming/converting data into SDTI variable block of SDTI frame/package), and for

inserting Start Code of the item (see FIG. 1, SAV, Start of active video) and the End Code of the

Item (see FIG. 1, EAV, End of active video) to thereby produces an SDTI signal (see FIG. 1,

SDTI variable block of SDTI frame/package; see section 2.1);

the system Item includes metadata (see FIG. 9, Control Data Item, note that control data

represents metadata, also known as, "data about data")) relating to one or more of the Picture,

Audio and Auxiliary Items in the content package (see section 2.4; "data about data" or

"metadata" in the control data items relates to content of video and audio data in the SDTI

frame).

Wilkinson does not explicitly disclose removing the Label of each Item. However,

Yamashita teaches a Label (see col. 3, lines 60-67; see col. 4, lines 35-42a identification flag)

having a predetermined number of bytes (see FIG. 4A; bytes/words) and at least one byte

identifying the Item a word count indicating the number of bytes of data of the Item (see FIG.

4A, data count), and the data of the Item (see FIG. 4A-B; data; see col. 6, lines 55 to col. 7, lines

9);

removing the Label of each Item (see FIG.1, Identification extraction circuit 43; see col.

4, lines 55 to col. 5, lines 22);

inserting a start code (see FIG. 3A-B and 4A-B; SAV) and Item type word (see FIG. 4A,

Data code; see col. 5, lines 60 to col. 6, lines 12; see col. 7, lines 19-24); and

inserting an end code (see FIG. 3A-B and 4A-B; EAV; see col. 7, lines 9-15, 40-45; see

col. 5, lines 60 to col. 6, lines 12) to thereby produce an SDTI signal (see FIG. 1 and 2A,

producing SDI signal; see col. 5, lines 30-46).

removing the Label of each Item (see FIG.1, Identification extraction circuit 43; see col.

4, lines 55 to col. 5, lines 22);

inserting a start code (see FIG. 3A-B and 4A-B; SAV) and Item type word (see FIG. 4A,

Data code; see col. 5, lines 60 to col. 6, lines 12; see col. 7, lines 19-24); and

inserting an end code (see FIG. 3A-B and 4A-B; EAV; see col. 7, lines 9-15, 40-45; see

col. 5, lines 60 to col. 6, lines 12) to thereby produce an SDTI signal (see FIG. 1 and 2A,

producing SDI signal; see col. 5, lines 30-46).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide removing the Label of each Item, as taught by Yamashita in the system of Wilkinson, so that it would provide a video signal editing apparatus with no disturbance; see Yamashita col. 1, line 59-67.

Neither Wilkinson nor Yamashita explicitly discloses inserting in place of the label. However, Tappen teaches inserting in place of the label (see FIG. 4 and 7A-B; col. 6, lines 13-19; see col. 39-60; replacing the label). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the label, as taught by Tappen in the combined system of Wilkinson and Yamashita, so that it would minimize differences among the different real time label switching operations; see Tappen col. 4, line 50-65.

Response to Arguments

13.   Applicant's arguments with respect to claims 1-3 and 5-11 have been considered but are moot in view of the new ground(s) of rejection.

14.   Applicant's arguments filed 6/27/06 have been fully considered but they are not persuasive.

Regarding claim 26 and 29, under 112 second and six paragraph, the applicant argued that, "...MPEP 2106 provides...the office personnel are to correlate each claim limitation to all portions of the disclosure that describes the claim limitation..." in page 13, paragraph 1-3.

In response to applicant's argument, the applicant is irrelevantly arguing by citing

MPEP 2106, rather than pointing or clarifying U.S.C. 112, second and six paragraph issues set

forth in the rejection MPEP 2181. The issue is **nowhere** in the specification nor drawing

discloses **corresponding structure, materials, or acts** that examiner can interpreted as **"means**

for removing" (claim 28, line 9) and **"means for providing"** (claim 28, line 12). Thus the claim

is unclear. Note that if a claim limitation invokes 35 U.S.C. 112, six paragraph, it must be

interpreted to cover the corresponding structure, materials, or acts in the specification and

"equivalents thereof." Also see MPEP 2181. Thus, applicant still fails to clearly point out

"corresponding structure, materials, or acts in the specification or in the drawing".

Regarding claim 1-3,5,7-29, under 35 USC 101 rejection, he applicant argued that,

"...claim 1, 2 and 9 are statutory as they define functionalities which are realized based on the

interrelationship of the structure to the file structure or signal format and the recited hardware

components...applicant respectively request that the Examiner provide an explanation of the

rejection in view of guideline of MPEP 2106...no express statement has been provided as to how

the language of the claims have interpreted to support the 35 USC 101 rejection...how such

limitations are deficient to define a practical application...." in page 14-15.

In response to applicant's argument, the examiner respectfully disagrees with the

argument above.

Amended claim 1 recites "a computer system **access** the file structure including the

metadata in the System Item to facilitate **accessing** the one or more of the Picture, Audio and

Auxiliary Items..." In view of guide line of MPEP 2106, the claimed computer system

"accessing the file structure" is not "structure and functional interrelationship between the data

structure and the computer software <u>and hardware</u> components". In other word, "accessing a file structure" is not a substantial functional application since <u>nothing</u> has been performed with accessed data. Moreover, there <u>are no computer hardware components</u> or equivalent thereof that interrelates with a file structure and computer system software are being claimed. The structural and functional interrelationship between the data structure and the computer software and hardware components as set forth in MPEG 2106 are <u>not</u> in the claimed invention. Thus, the claim invention has <u>no substantial practical application</u> of accessed data, in view of MPEP 2106.

Moreover, regarding method claims 12, 13, and 25, the claimed series of steps cover every substantial practical application of an abstract idea, thereby; the claim invention preempts a 101 judicial exception of abstract idea; **and there is no "useful, tangible and concrete" final result from <u>physical transformation</u> (i.e. after performing series of step to produce the final format of a signal).**

Regarding providing no express statement, applicant attention is directed to previous office action pages 5-12, where detailed statement and explanation to support 35 USC 101 rejection.

Regarding explaining claim terminology, examiner asserts "content package, System Item, Picture Item, Audio Item and Auxiliary Item" are a signal/file structure as shown in applicant FIG. 1.

Regarding claims 1, 2, 3, 12, 22-24, the applicant argued that, "…the office action does not specify where the control data of FIG. 1 and 9 of Wilkinson includes an item header indicating the number of element blocks in the alleged "System Item"…the control data of

Wilkinson does not include "a word count" as recited in the claim..." in page 15, paragraph 4; page 16; page 19.

In response to applicant's argument, the examiner respectfully disagrees with the argument above.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **an item header indicating the number of element blocks in the alleged "System Item"**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claim 1 recites, "a computer system...the System and the one or more of the Picture, Audio and Auxiliary Items each compressing: ...a word count...an Item header..." Thus, it is clear that the (computer) system comprises a word count and an Item header, <u>not</u> "System Item" as argued by the applicant.

Regarding the FIG. 1 and FIG. 9 of Wilkinson, office action clearly shows and discloses the argument limitation since figures are very clear to one skilled in the ordinary art. FIG. 1 shows the general SDTI frame, where a control data stream, Video data stream (Picture and/or ancillary data are within it), and Audio data stream. FIG. 9, a specific structure of a control data stream.

Wilkinson discloses a System (**see FIG. 1, a SDTI system frame**) comprises a word count (**see FIG. 2, Word Count field in video format; see FIG. 7, Word Count field in audio format; or see FIG. 9, Word Count field in control format**) indicating the number of bytes of data of the Item (**see section 2, 2.1, 2.2, 2.3, 2.4**); and

an Item header, preceding the number of data blocks (**see FIG. 2-5; 4 byte MB header**

(i.e. GOP header, system, video index) in video format, see FIG. 6, MB header in ancillary

format; or see FIG. 7-8, Audio header in audio format; note MB header in video, or audio header

in audio format are before the MB video data or audio data), and indicating the number of

element data blocks in the Item (**see FIG. 4-6, MB length in video or ancillary; or see FIG. 8,**

the audio header calculates the block length of audio); see section 2, 2.2, 2.2.1, 2.2.2, 2.2.3,

2.2.4, 2.3.

Regarding claims 2, 9, 13,20, 26, the applicant argued that, "…no disclosure in

Eneroth,…of the LEQ code being associated with anything equivalent to an end code being

removed…Eneroth does not teach or suggest that "each Item being modified in that a Label

having a predetermined number of bytes and identifying the Item replaces the Stat Code of the

Item and End Code of the Item is removed"…" in page 15-17,19.

In response to applicant's argument, the examiner respectfully disagrees with the

argument above.

Wilkinson discloses each Item being modified in that a Label (**see FIG. 2, Type field in**

video format; see FIG. 7, Type field in audio format; or see FIG. 9, Type field in control

format) having a predetermined number of bytes and identifying the item (**see FIG. 2,7,9, one**

byte type field identifies the type of the data); see section 2, 2.1, 2.2, 2.3,2.4), Start Code of

· the item (**see FIG. 1, SAV, Start of active video**) and the End Code of the Item (**see FIG. 1,**

EAV, End of active video).

Eneroth teaches a Label (**see FIG. 6, label E 13, see FIG. 10, LEQ codes; see col. 6,**

lines 5-25) having a predetermined number and identifying the Item (**see FIG. 6 or 9, label or**

LEQ has predetermined number to identify the length of the cell) replaces the Start Code of

the Item (see **FIG. 6, label E field 11, or see FIG. 9, LEQ field 25; label or LEQ code is**

replaced/inserted at the beginning/start of the cell) and the End Code of the Item is removed

(see col. 5, lines 1 to col. 6, lines 10; and thus when replacing label/codes (e.g. 0, 1, 00, 11,

etc.) at the start of the payload which represent both start and end of the payload, there is

no end code/flag require (i.e. removing both start and end code)).

Thus, it is clear that the combined system of Wilkinson and Eneroth disclose the argued

limitation.

Regarding claims 2, 9, 13, 20, 26 the applicant argued that, "...there is no suggestion

or motivation to modify the device described by Wilkinson with teaching of

Eneroth....Wilkinson and Eneroth solve very different problems in different ways, one skilled in

the art would not be motivated to combine their respective features..." page 17-19.

In response to applicant's argument that there is no suggestion to combine the

references, the examiner recognizes that obviousness can only be established by combining or

modifying the teachings of the prior art to produce the claimed invention where there is some

teaching, suggestion, or motivation to do so found either in the references themselves or in the

knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071,

5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir.

1992). In this case, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to replace label/codes (e.g. 0, 1, 00, 11, etc.) at the start of the payload

which represent both start and end of the payload, as taught by Eneroth in the system of

Wilkinson, so that it would **dynamically change the size of the cell during an ongoing**

connection thereby providing efficiency while the overhead cost is reduced; see Eneroth col. 1, line 20-67.

In response to applicant's argument Eneroth is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Wilkinson and Eneroth are concerned with forming/creating a frame. Moreover, Eneroth also teaches using a label that function as both start of the frame and end of the frame, thereby replacing a label at the start of the frame, and removing the end of frame. By doing so, it would provide extra space in the frame since a function of two control/header fields can be replaced with one by utilizing a label method as taught by Eneroth. Thus, it is clear that Eneroth is an analogous art.

Regarding claim 25 and 28, the applicant argued that, "...Wilkinson and Yamashita do not disclose the feature of "inserting in place of the label...Tappen does not teach or suggest "inserting a start code and Item type word in place of the Label" ..." in page 20.

In response to applicant's argument, the examiner respectfully disagrees with the argument above.

Wilkinson discloses inserting Start Code of the item (see **FIG. 1, SAV, Start of active video**) and the End Code of the Item (see **FIG. 1, EAV, End of active video**) to thereby produces an SDTI signal (see **FIG. 1, SDTI variable block of SDTI frame/package; see section 2.1**).

Yamashita teaches a Label (see col. 3, lines 60-67; see col. 4, lines 35-42a identification flag) having a predetermined number of bytes (see FIG. 4A; bytes/words) and at least one byte identifying the Item a word count indicating the number of bytes of data of the Item (see FIG. 4A, data count), and the data of the Item (see FIG. 4A-B; data; see col. 6, lines 55 to col. 7, lines 9)

removing the Label of each Item (see FIG.1, Identification extraction circuit 43; see col. 4, lines 55 to col. 5, lines 22);

inserting a start code (see FIG. 3A-B and 4A-B; SAV) and Item type word (see FIG. 4A, Data code; see col. 5, lines 60 to col. 6, lines 12; see col. 7, lines 19-24); and

inserting an end code (see FIG. 3A-B and 4A-B; EAV; see col. 7, lines 9-15, 40-45; see col. 5, lines 60 to col. 6, lines 12) to thereby produce an SDTI signal (see FIG. 1 and 2A, producing SDI signal; see col. 5, lines 30-46).

removing the Label of each Item (see FIG.1, Identification extraction circuit 43; see col. 4, lines 55 to col. 5, lines 22);

inserting a start code (see FIG. 3A-B and 4A-B; SAV) and Item type word (see FIG. 4A, Data code; see col. 5, lines 60 to col. 6, lines 12; see col. 7, lines 19-24); and

inserting an end code (see FIG. 3A-B and 4A-B; EAV; see col. 7, lines 9-15, 40-45; see col. 5, lines 60 to col. 6, lines 12) to thereby produce an SDTI signal (see FIG. 1 and 2A, producing SDI signal; see col. 5, lines 30-46).

Tappen teaches inserting in place of the label (see FIG. 4 and 7A-B; col. 6, lines 13-19; see col. 39-60; replacing the label).

Thus, the combined system of Wilkinson, Yamashita and Tappen discloses the claimed invention limitations.

Regarding claims 25 and 28, the applicant argued that, "...the skilled person would not be inclined to look Tappen to add to the feature in Wilkinson and Yamashita, as Tappen is from a completely different technical filed ...no motivation to look to Tappen..." page 21.

In response to applicant's argument, the examiner respectfully disagrees with the argument above.

In response to applicant's argument that the skilled person would not be inclined to look Tappen to add to the feature, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's argument Tappen is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Wilkinson, Yamashita and Tappen are concerned with forming/creating/editing a frame or packet. Moreover, Tappen also teaches inserting in place of a label in the frame/packet constructing. Thus, it is clear that Tappen is an analogous art.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the label, as taught by Tappen in the combined system of Wilkinson and Yamashita, so that it would minimize differences among the different real time label switching operations; see Tappen col. 4, line 50-65.

Conclusion

15.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The

examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Doris H. To can be reached on 571-272-7629. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM
7-20-06

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